

# Fact Sheet



## *For Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act*

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the original Fact Sheet corresponding with the issuance of the initial Title V operating permit issued on March 15, 2005.

Permit Number: **R30-01100009-2005**  
Application Received: **March 24, 2006**  
Plant Identification Number: **03-54-01100009**  
Permittee: **Steel of West Virginia, Inc.**  
Facility Name: **Huntington Facility**  
Mailing Address: **1717 2<sup>nd</sup> Avenue, Huntington, WV 25703**

Permit Action Number: *SM01*; Revised: *July 10, 2006*

---

Physical Location:	Huntington, Cabell County, West Virginia
UTM Coordinates:	375.03 km Easting • 4,253.77 km Northing • Zone 17
Directions:	From Charleston, travel West on I-64 to Exit 15. Turn right onto (West) US-60 for 5.3 miles. US-60 is 3 <sup>rd</sup> Avenue in Huntington. Turn right onto 17 <sup>th</sup> Street. Office building is 153 feet on the left.

---

### **Facility Description**

SWVA Inc. manufactures hot rolled steel products covered by Standard Industrial Classification (SIC) Code 3312. The facility has the potential to operate 24 hours per day, 7 days per week, 52 weeks per year. The facility consists of two electric arc furnaces (EAFs) rated at 20 tons per hour, a continuous caster and caster cutoff torches rated at 40 tons per hour, scrap preparation torches rated at 0.5 mmBtu/hr, and ladle preheaters rated at 4 mmBtu/hr. The manufacturing steps include melting scrap steel, casting billets, reheating and hot rolling the billets, shot blasting, welding, punching and shearing.

This current modification request does not involve changes to the facility or the manner in which

it is operated, but rather involves correcting a mistake that occurred during initial permit issuance, with respect to NSPS applicability. The application for the initial Title V permit mistakenly indicated that the EAFs were subject to NSPS Subpart AA due to changes that were made to the equipment in the 1979 - 1980 time period. In this time period, SWVA replace the shells and bottoms of the EAFs with water-cooled shells and bottoms. It was reported that the shell and bottoms replacement had no impact on the rate at which the EAFs could melt scrap. SWVA claims that the limiting factor for the EAFs to melt scrap has always been the amount of electricity they can pull from the electrical grid. The EAF's emission rates are based on the rate of melt they can melt scrap.

NSPS requirements can be triggered by existing sources if they are "modified" or "reconstructed". Per 40CFR§60.14, the regulatory definition of "modification" is "any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies..." The regulatory definition of "reconstruction", per 40 CFR 60.15, is "the replacement of components of an existing facility to such an extent that...[t]he fixed capital cost of the new components exceed 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility..."

As provided by SWVA: A cost estimate for new construction in 1979 would be approximately \$3,778,505 per EAF (#2 EAF construct costs in 1959 of \$1,517,472 multiplied by 2.49 per the U.S. Department of Labor Bureau of Labor Statistics web page inflation calculator for the time period of 1959 to 1979). The actual cost of the shell and bottom replacement was \$245,500 for EAF #1 and \$308,200 for EAF #2. This is well below the 50% threshold that would constitute "reconstruction" under the NSPS.

Permit R13-2618 has been issued (October 3, 2005) for the construction of a new electric arc furnace (EAF), which is to replace the two existing EAFs. At this time the new EAF has not yet been installed, and therefore the Title V has not yet been updated to include this new equipment. The permittee will have up to 12 months from the date of start-up of the new EAF to submit a complete application for a significant modification to add requirements associated with the new EAF (including R13-2618 and NSPS, Subpart Aaa).

Changes to the permit include the removal of permit terms associated with NSPS, and the addition of terms/conditions of 45CSR7 (in particular, sections 3.2. & 5.1) to address the exception to the 20% opacity limit and the minimization of fugitive emissions. An additional recordkeeping requirement was established for the purpose of tracking the amount of time the EAF's undergo tapping/charging activities. This is due to the exception for the 20% opacity limit, "...shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than 40% opacity for any period aggregating no more than five (5) minutes in any sixty (60) minute period.

Note: For clarification, the maximum allowable particulate matter limits established in the table of section 4.1.3. of the permit represent the maximum allowable rate of particulate matter through the stack per 45CSR7. This limit applies whether air pollution control equipment is present or not. In some cases, controls may be needed in order for the emission source to comply with the limit, which in turn would create a higher margin of compliance with the statutory limit. In other cases, the emission source may be in compliance with the limit without the utilization of controls. In either case, the limit represents a true "maximum" particulate matter emission rate for that particular source, and may not be exceeded. Stricter limits that more accurately reflect the process may be streamlined with the maximum allowable limits of 45CSR7. In this case, compliance with the more stringent limit would assure compliance with the maximum allowable limit of 45CSR7.

## Emissions Summary

The changes involved with this modification have no affect on emissions.

## Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit over 100 tons per year of all criteria pollutants. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, Steel of West Virginia, Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

## Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State: 45CSR30 Operating permit requirements.

State Only: N/A

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

## Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
R13-2618	October 3, 2005	This construction permit does not affect this modification.

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

## **Determinations and Justifications**

None

## **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

### 40CFR60, Subpart AA:

Electric Arc Furnaces (EAFs) were originally and mistakenly designated at NSPS sources during the initial Title V permit process. Based on the information provided as part of this modification request, the WVDAQ agrees that NSPS, Subpart AA does not apply to the EAFs nor the canopy hood since it is not part of a "dust handling system".

## **Request for Variances or Alternatives**

None

## **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

## **Comment Period**

Beginning Date: June 6, 2006  
Ending Date: July 5, 2006

All written comments should be addressed to the following individual and office:

Toby Scholl, Engineer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57th Street, S.E.  
Charleston, WV 25304

## **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

## **Point of Contact**

Toby Scholl  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57th Street, S.E.  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1213 • Fax: 304/926-0478

## **Response to Comments**

1. Comment from USEPA:

On page 2 of the fact sheet, paragraph 3, it mentions the citation 40 CFR 60.15 as the regulatory definition of 'modification...that definition is found under 40 CFR 60.14, and the definition for 'reconstruction' is 40 CFR 60.15.

This comment was addressed and the correction was made accordingly.